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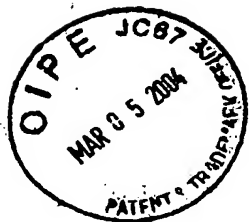
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Serial No.: 10/675,541  
Title: System and Method for Detecting Emitter  
Signals having Multi-Valued Illumination Times  
Inventor: Anthony J. Gounalis

Annotated Sheets Showing Changes

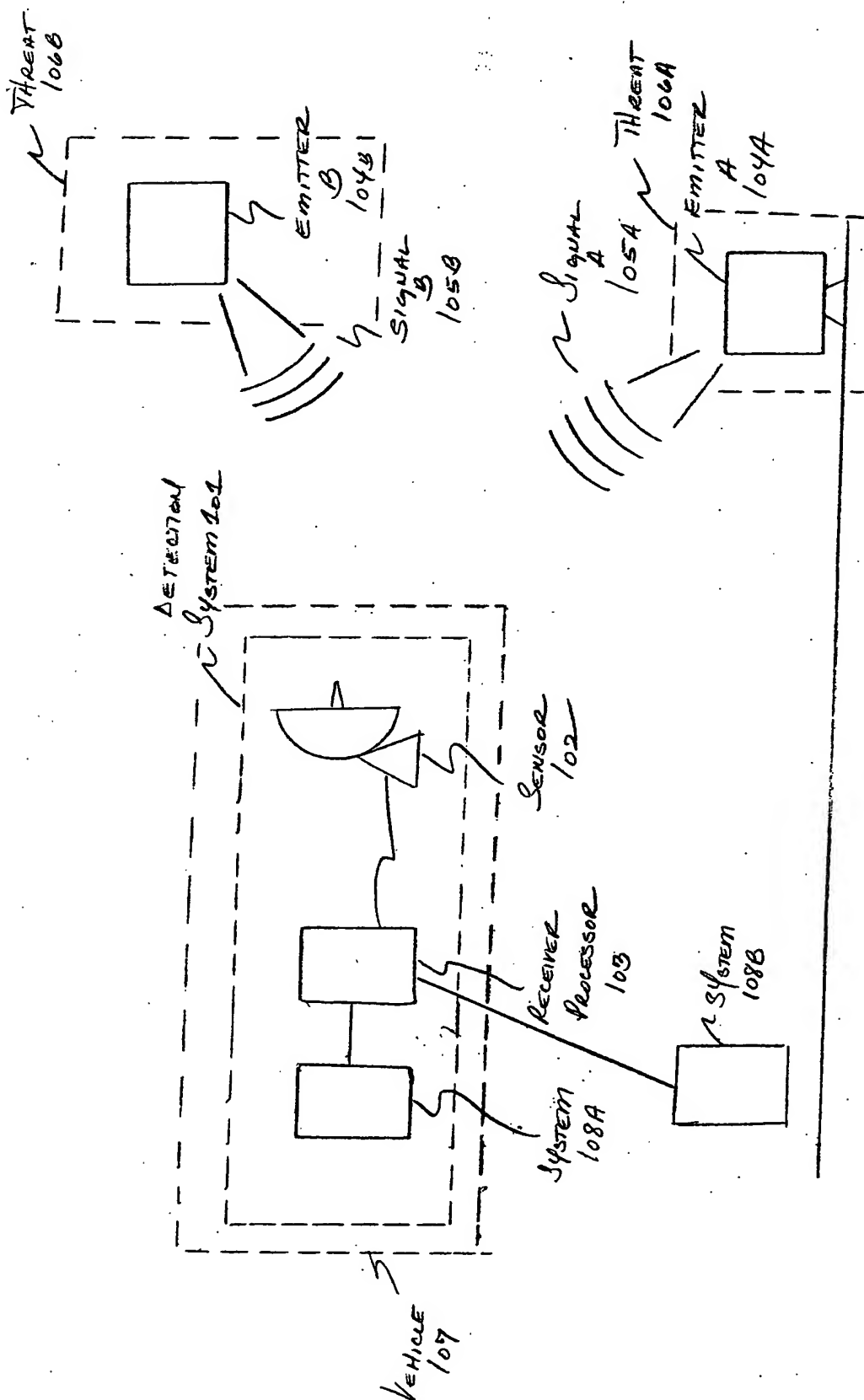


FIGURE 1

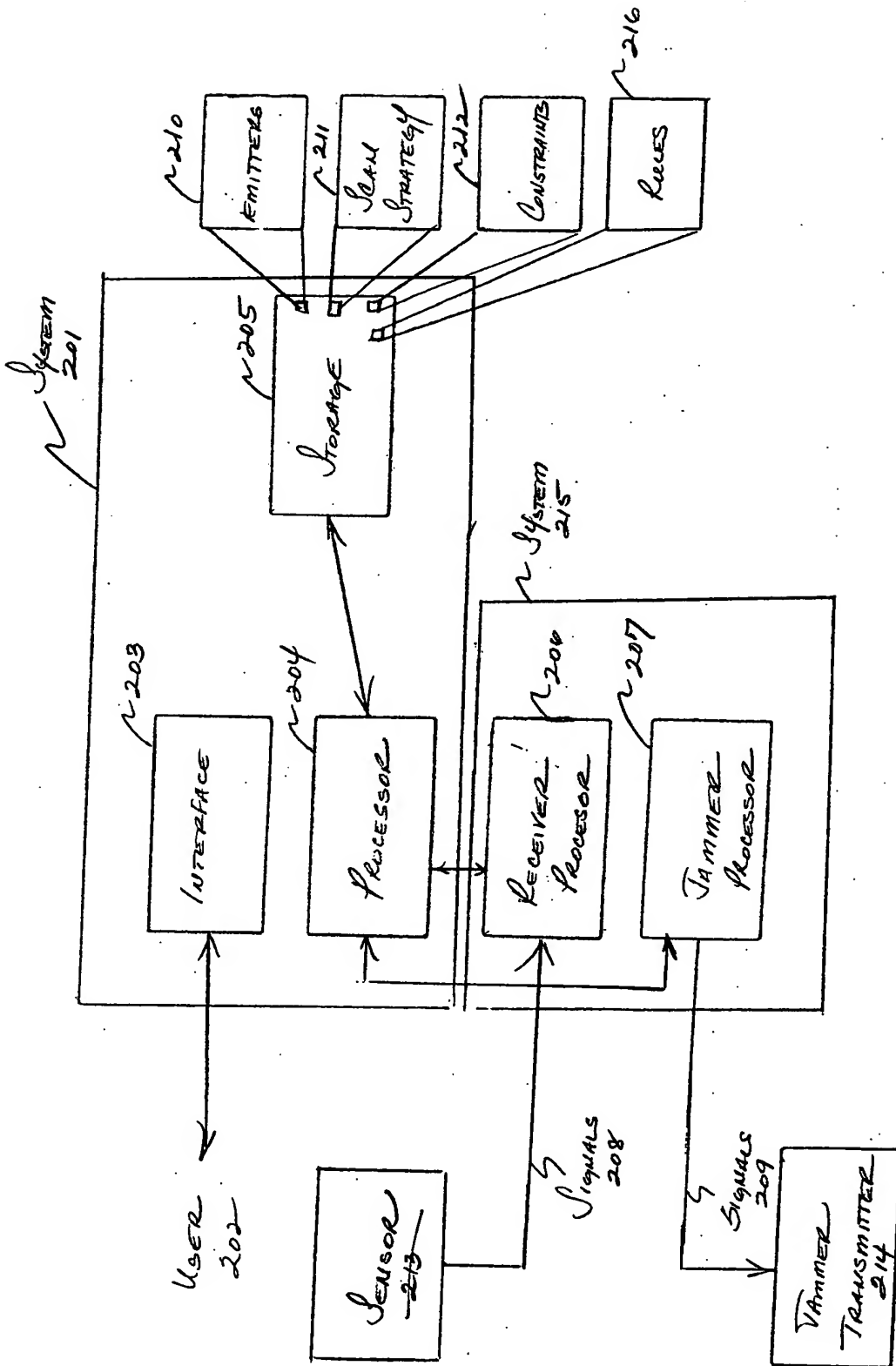
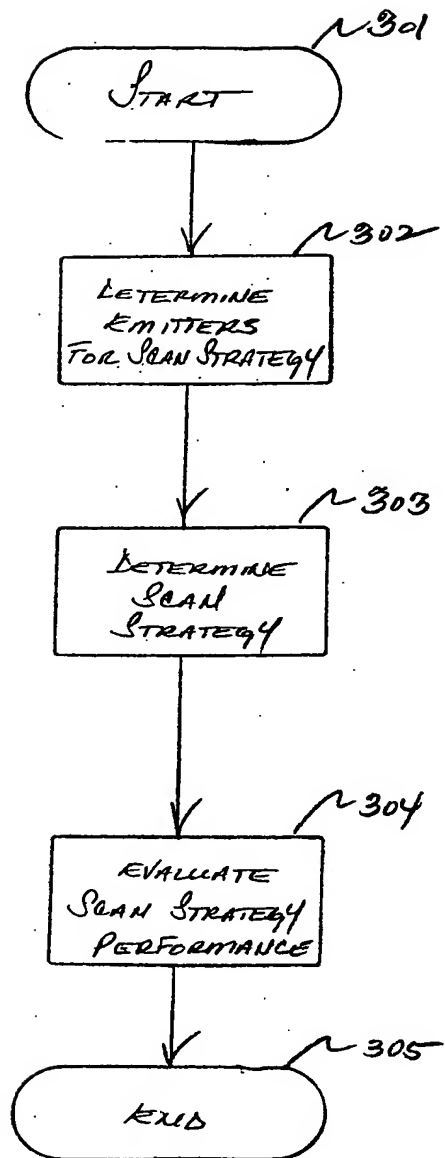


Figure 2



PROCESS  
300

FIGURE 3

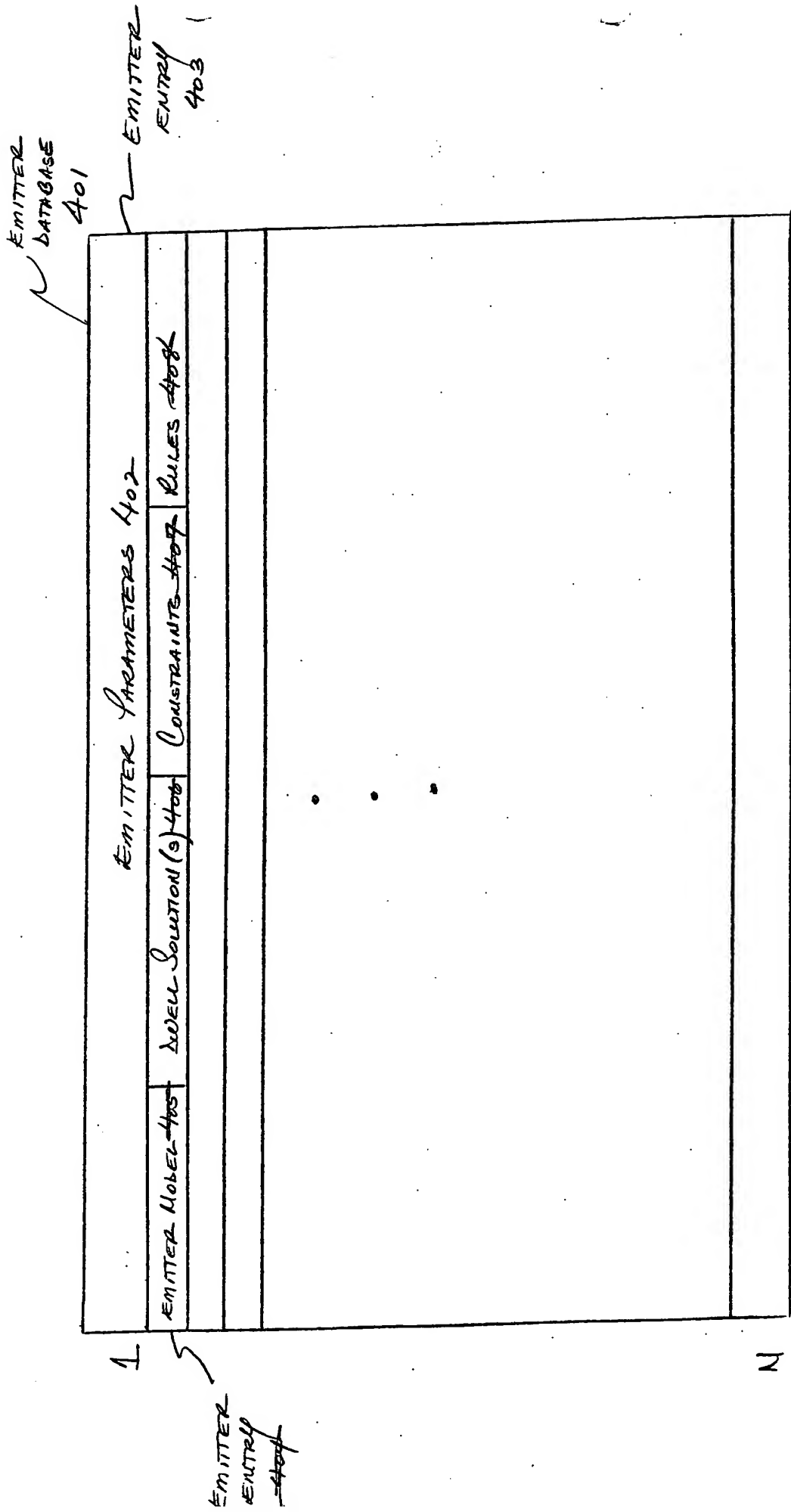


Figure 4

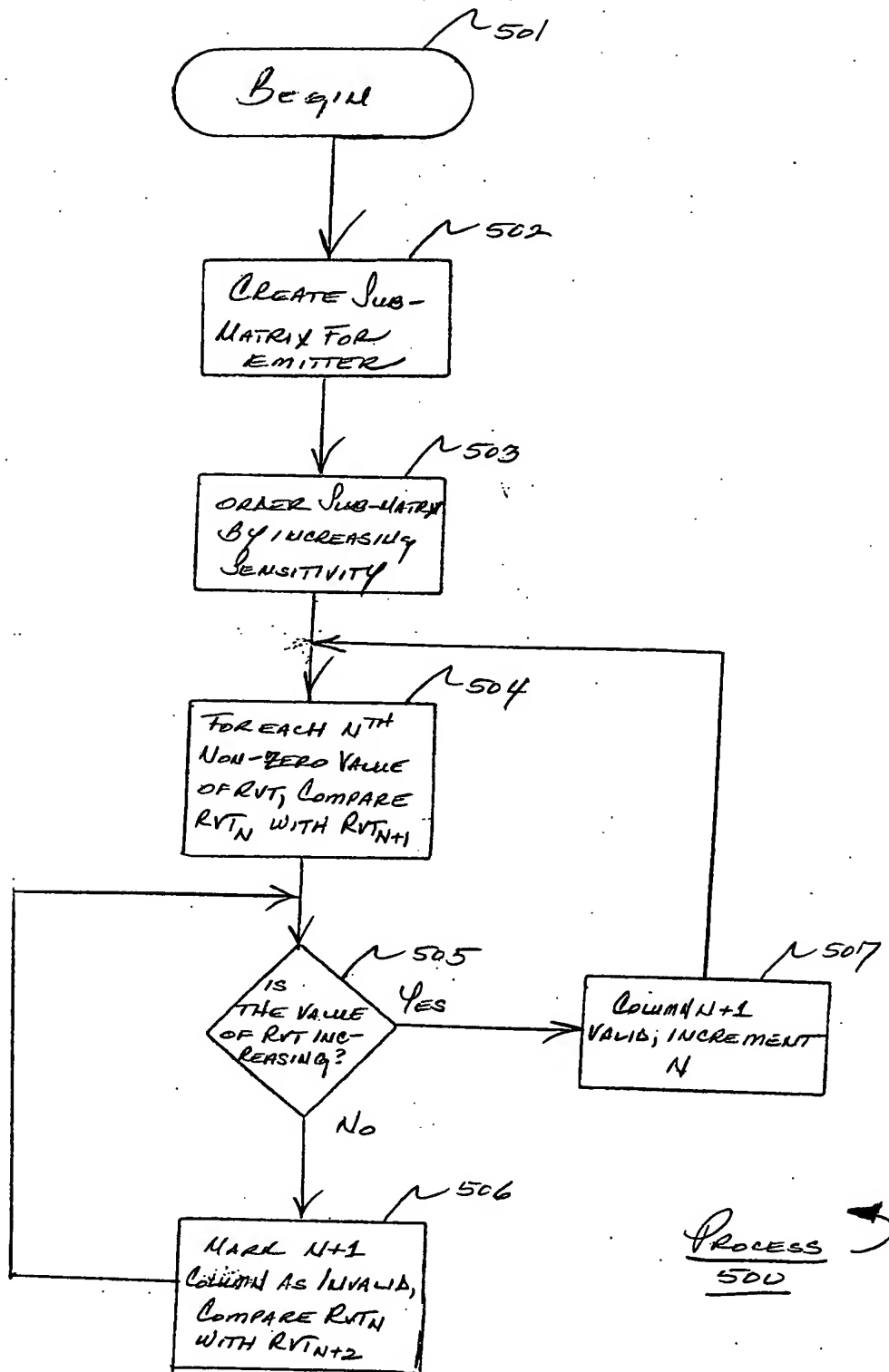


FIGURE 5

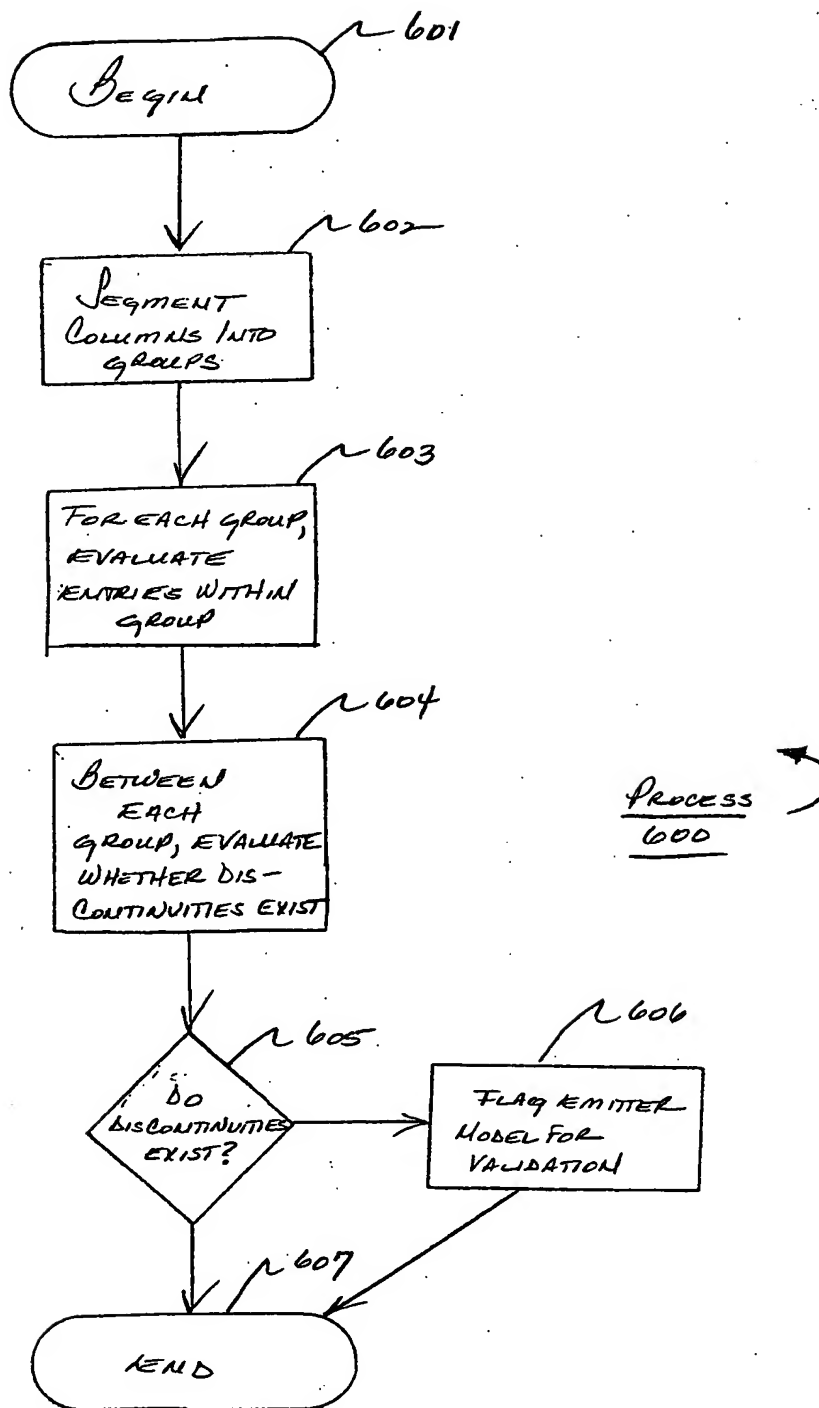


FIGURE 6

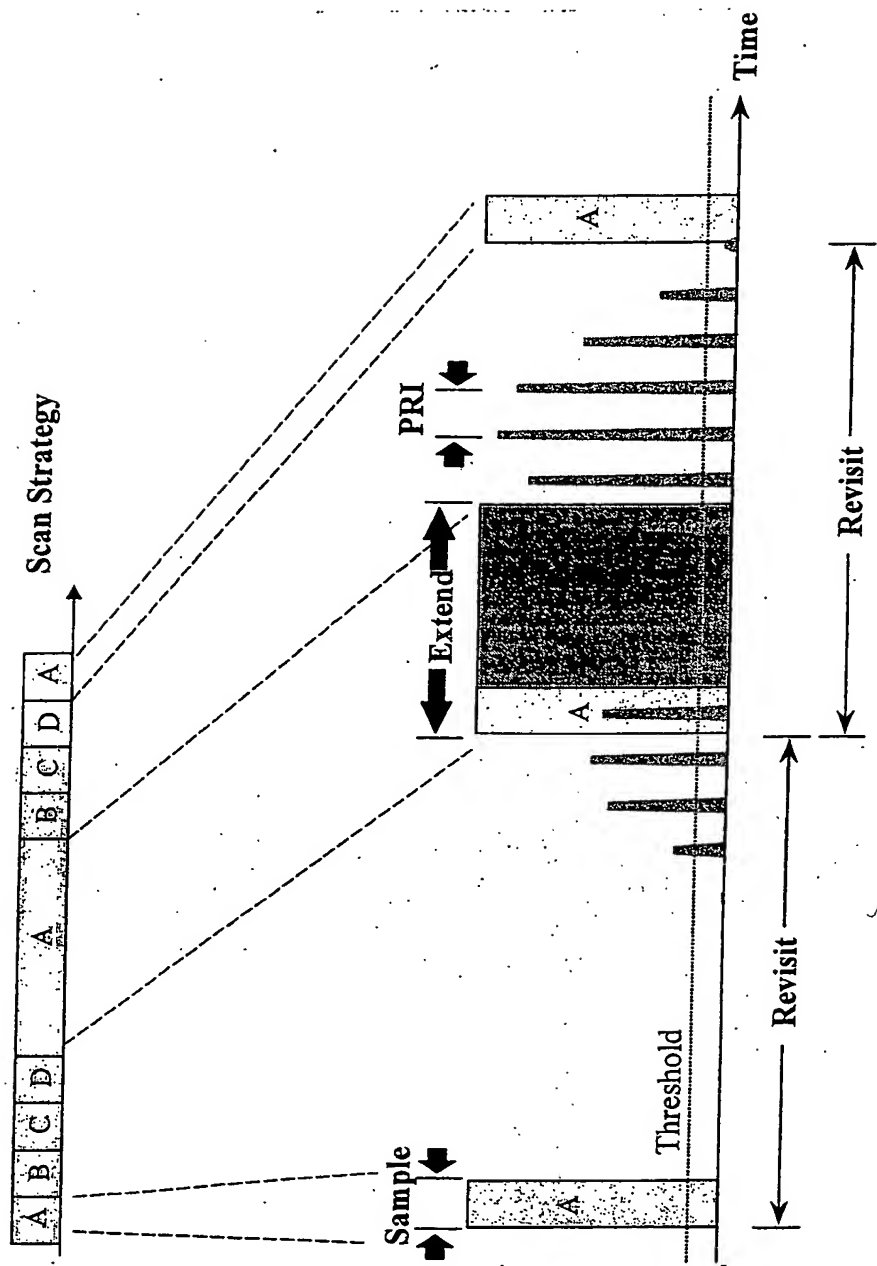
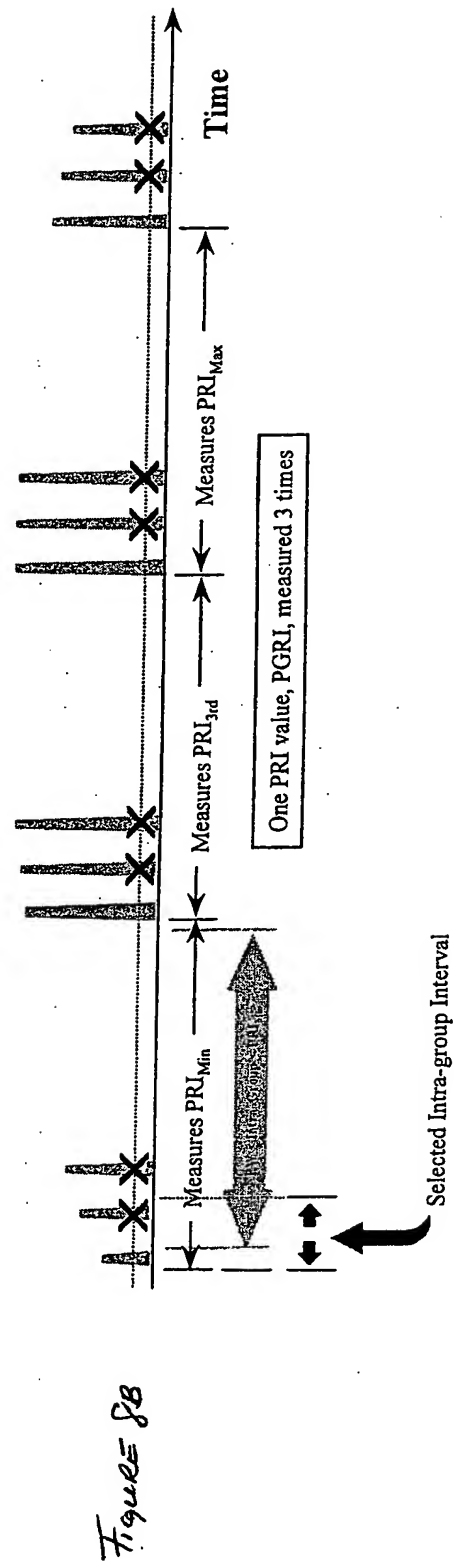
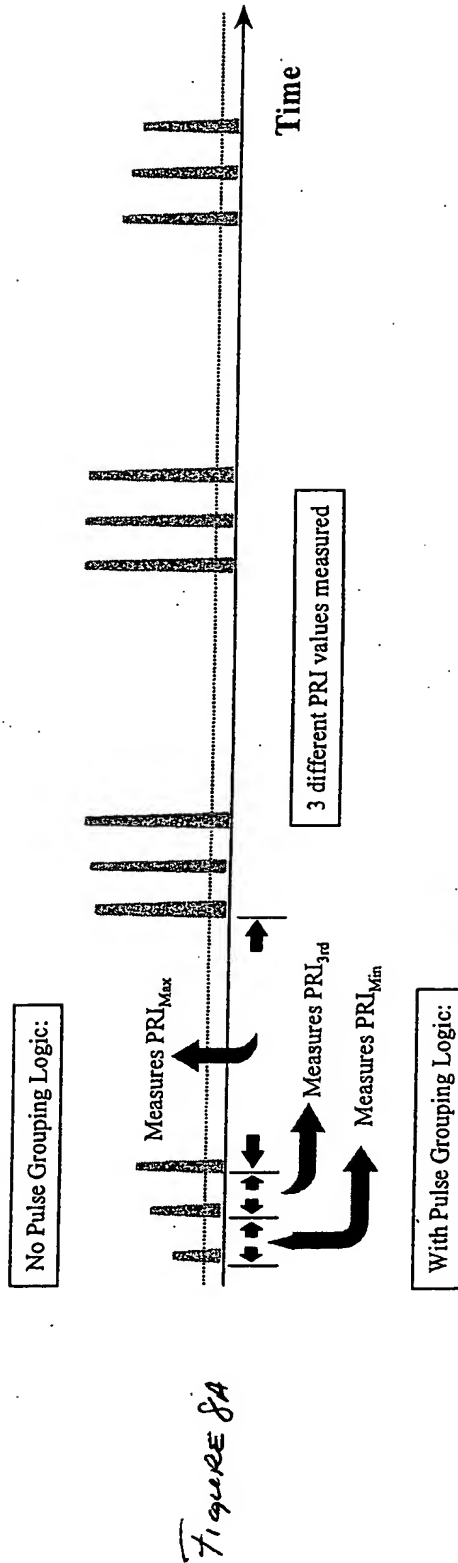


Figure 7





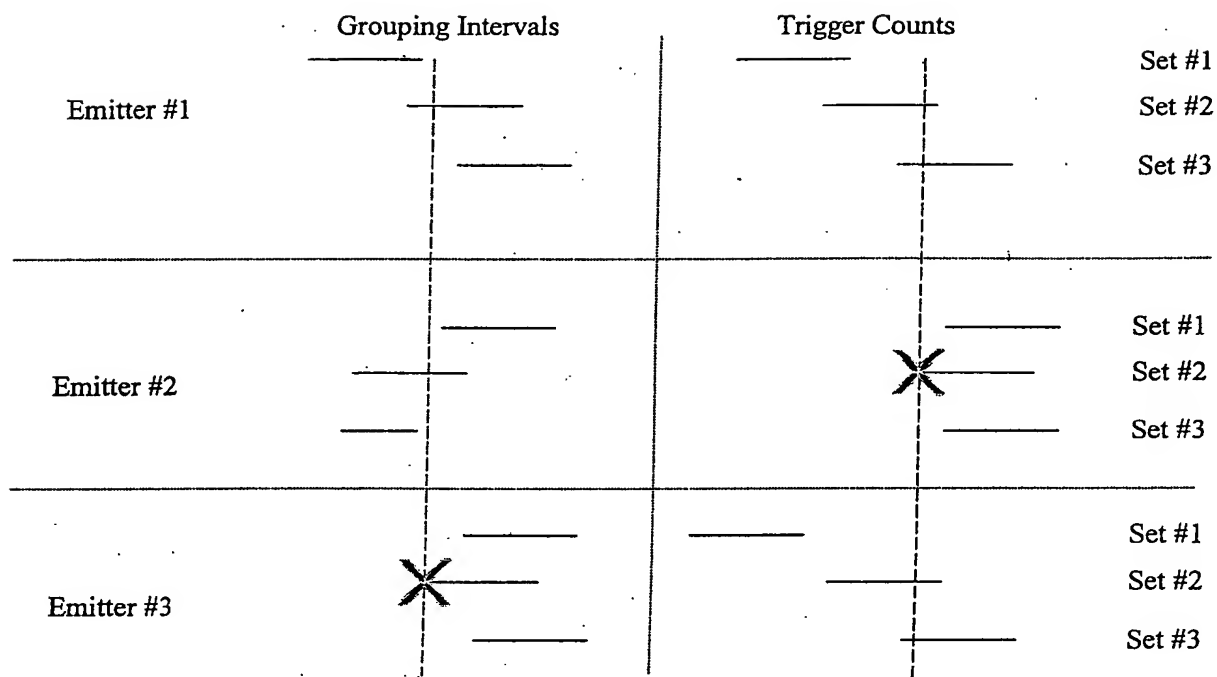
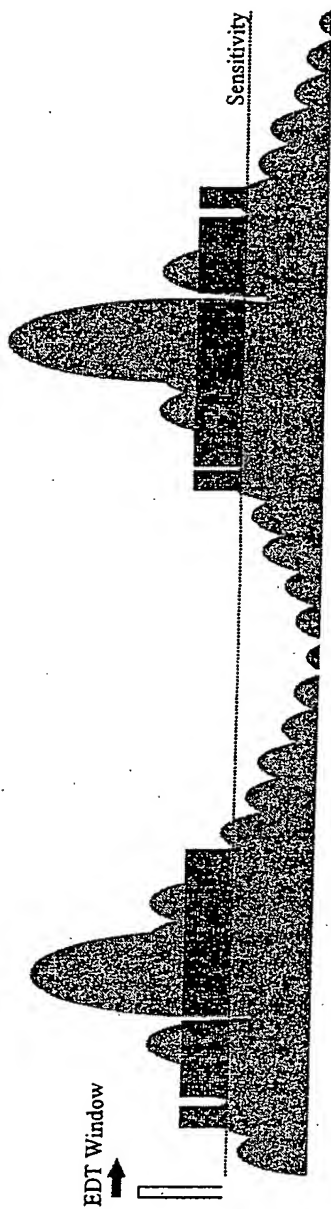


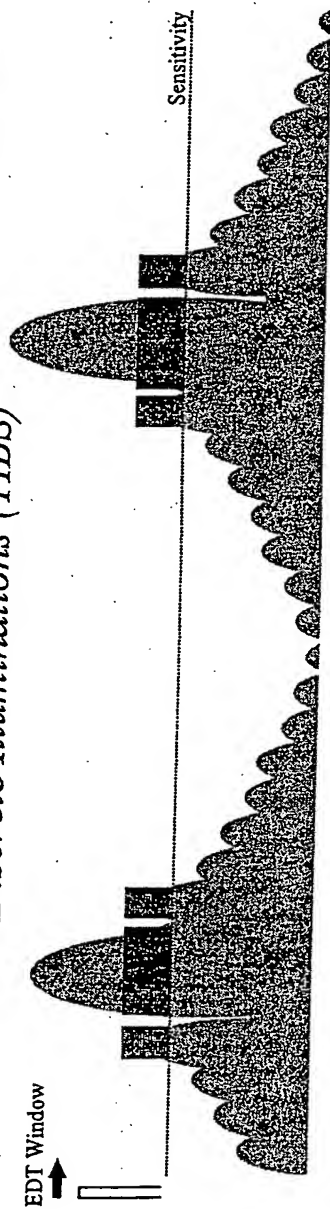
Figure 9

Figure 104



*Discrete Illuminations (TIBS)*

Figure 108



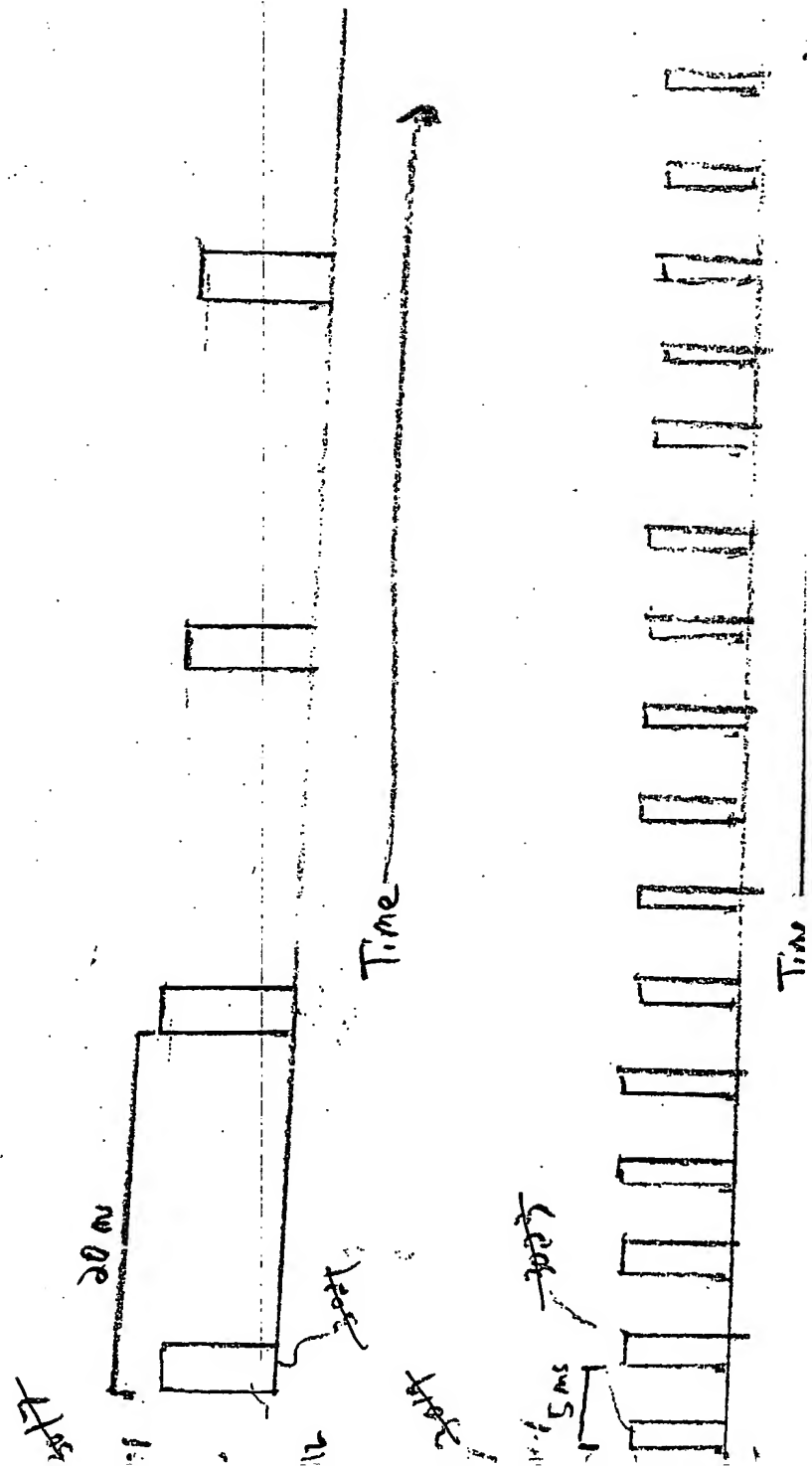
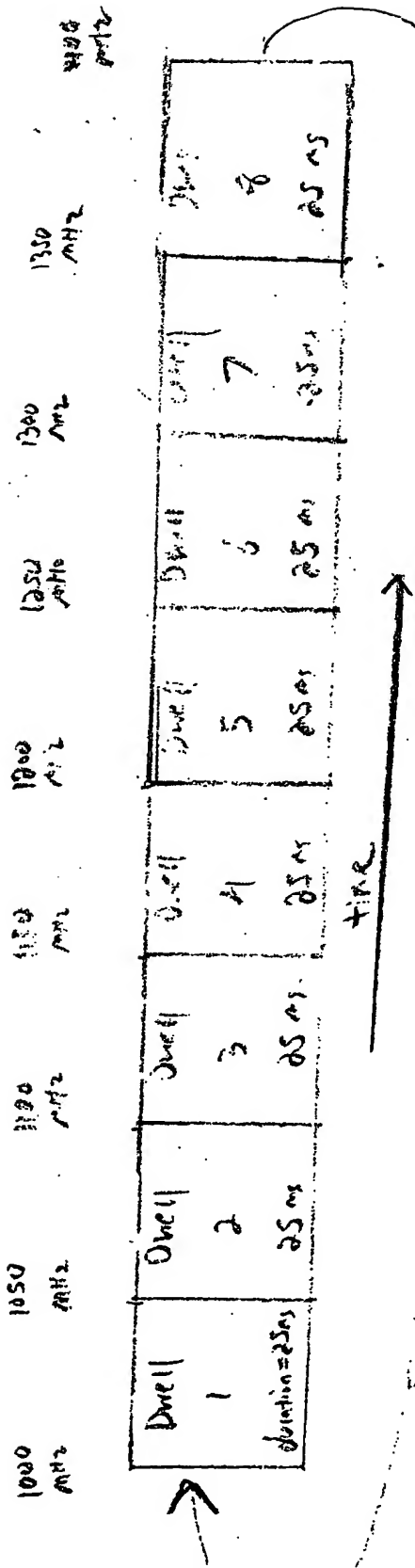
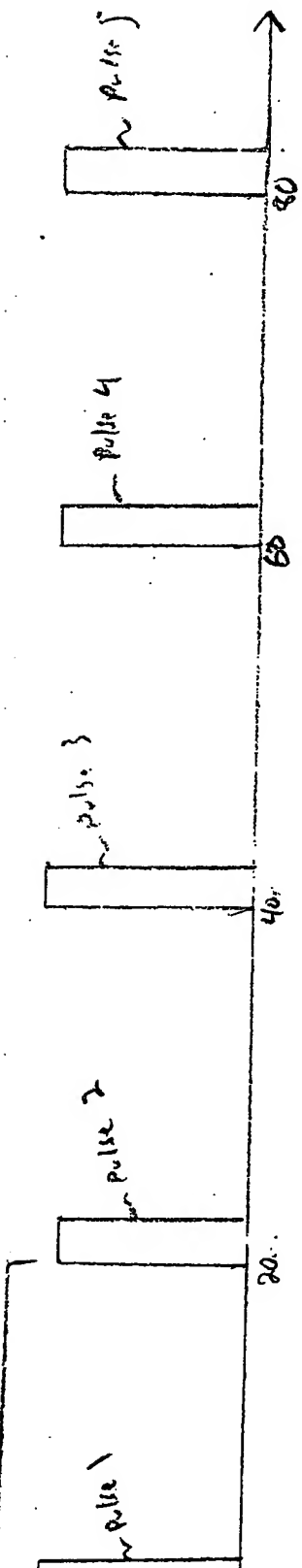
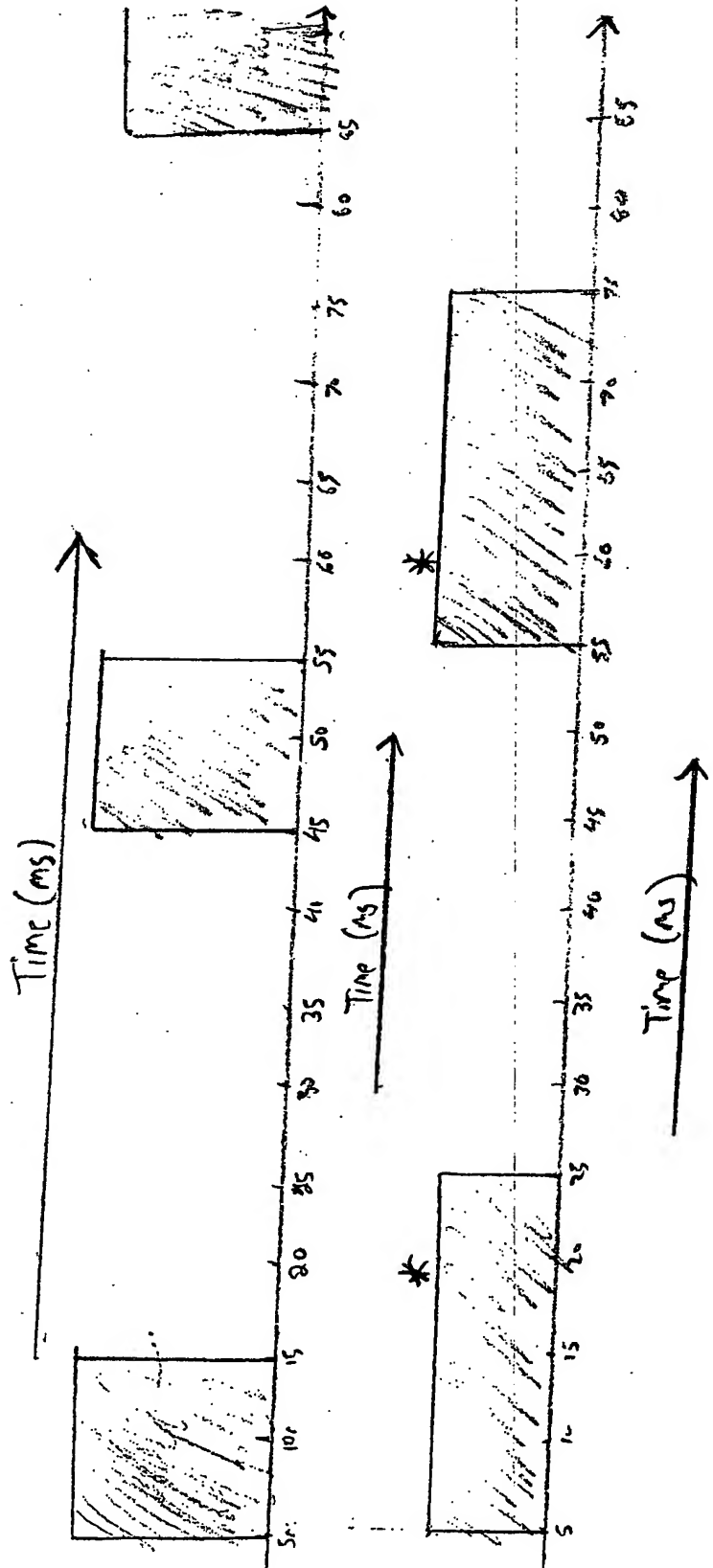


Figure 11

PRI = 20ns



Emitter 3101



Solution 1  
Drill Duration = 12ms  
Reset Time = 40ms

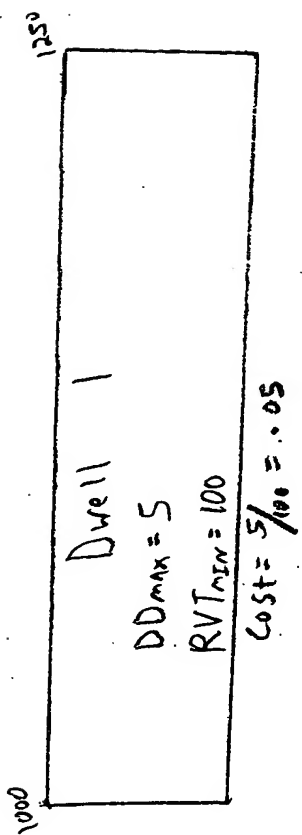
Solution 2  
Drill Duration = 20ms  
Reset Time = 50ms

Figure 12

4000

Emitter Name	250 MHz IF 15 MHz BW RV T	30 MHz IF 15 MHz BW RV T	RF Min (MHz)	RF Max (MHz)	RF MDT (ms)
E1	100 ns	650 ns	1000	1300	3
E2	120 ns	780 ns	1220	1350	5
E3	110 ns	330 ns	1510	1910	2
E4	130 ns	390 ns	1730	1860	4

Figure B



Solution 1

	1000	1020	1040	1060	1080	1100	1120	1140	1160	1180	1200	1220	1240	1260	1270
Dwell 1	Dwell 2	Dwell 3	Dwell 4	Dwell 5	Dwell 6	Dwell 7	Dwell 8	Dwell 9							
DD <sub>max</sub>	DD <sub>max</sub>	DD <sub>max</sub>	DD <sub>max</sub>	DD <sub>max</sub>	DD <sub>max</sub>	DD <sub>max</sub>	DD <sub>max</sub>	DD <sub>max</sub>							
3	3	3	3	3	3	3	3	5							
RVT <sub>TRN</sub>	RVT <sub>TRN</sub>	RVT <sub>TRN</sub>	RVT <sub>TRN</sub>	RVT <sub>TRN</sub>	RVT <sub>TRN</sub>	RVT <sub>TRN</sub>	RVT <sub>TRN</sub>	RVT <sub>TRN</sub>							
650	650	650	650	650	650	650	650	650							
Cost	Cost	Cost	Cost	Cost	Cost	Cost	Cost	Cost							
$\frac{3}{650} + \frac{3}{650} + \frac{3}{650} + \frac{3}{650} + \frac{3}{650} + \frac{3}{650} + \frac{3}{650} + \frac{3}{650} + \frac{5}{650} =$															

Solution 2

Total Cost =  $\frac{31}{650} \approx .048$

Figure 14A

1760

$$DD_{\max} = 4 \text{ ns}$$
$$R_{VTmin} = 330\text{ms}$$

$$\text{Cost} = \frac{4}{330} = .012$$

Solution

Solution 2

1510	1540	1570	1600	1630	1660	1690	1720	1750	1780
Dwell 1	Dwell 2	Dwell 3	Dwell 4	Dwell 5	Dwell 6	Dwell 7	Dwell 8	Dwell 9	Dwell 10
DDmax 2	DDmax 2	DDmax 2	DDmax 2	DDmax 2	DDmax 2	DDmax 2	DDmax 2	DDmax 4	DDmax 4
RVTime 330ms	RVTime 330ms	RVTime 330ms	RVTime 330ms	RVTime 330ms	RVTime 330ms	RVTime 330ms	RVTime 330ms	RVTime 330ms	RVTime 330ms
cost 2/330	cost 2/330	cost 2/330	cost 2/330	cost 2/330	cost 2/330	cost 2/330	cost 2/330	cost 4/330	cost 4/330

$$22/330 = .06$$

Figure 14B



Figure 15

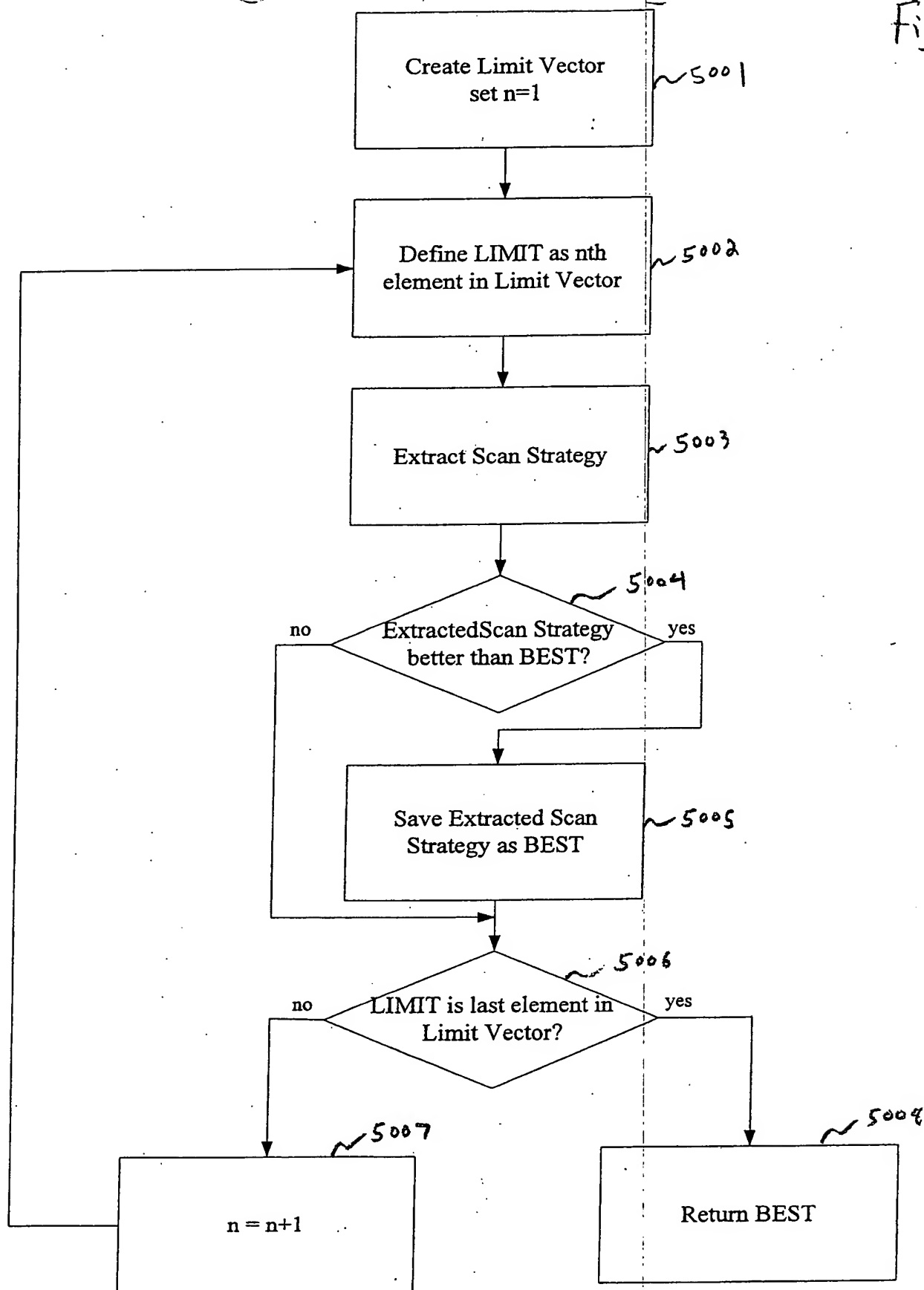
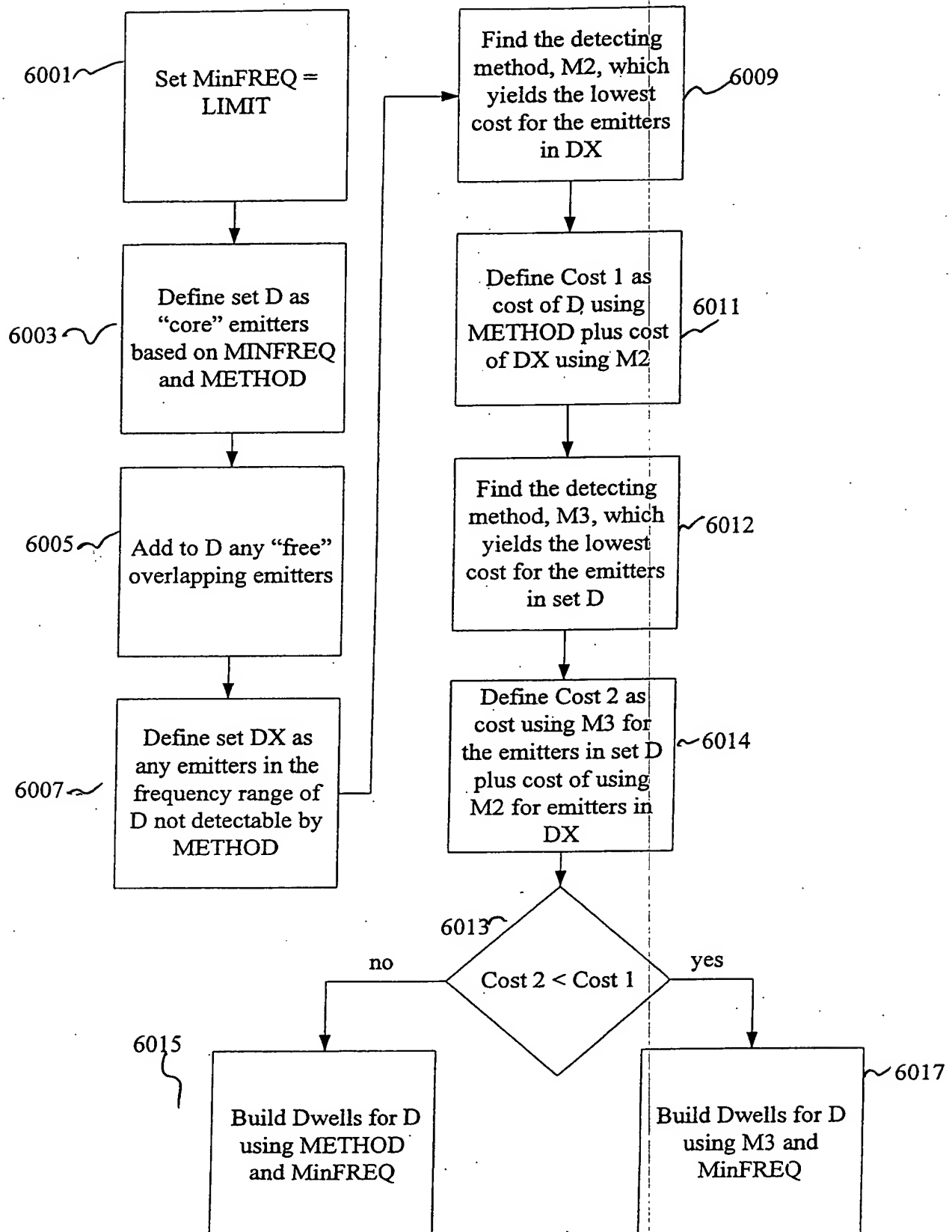


Figure 16



Name	RF Min	RF Max
E1	1100	1200
E2	1150	1250

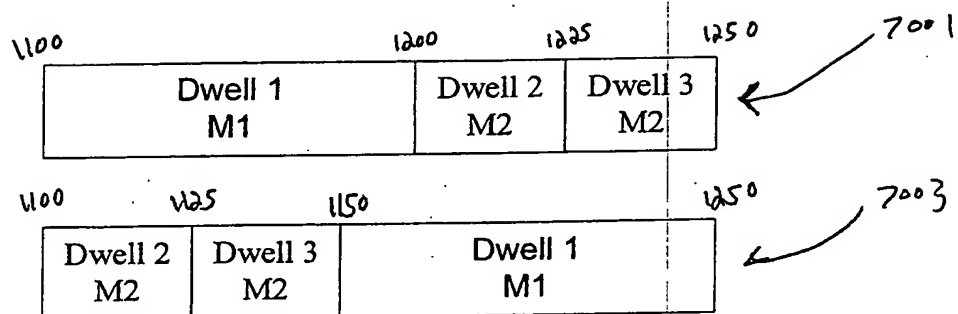
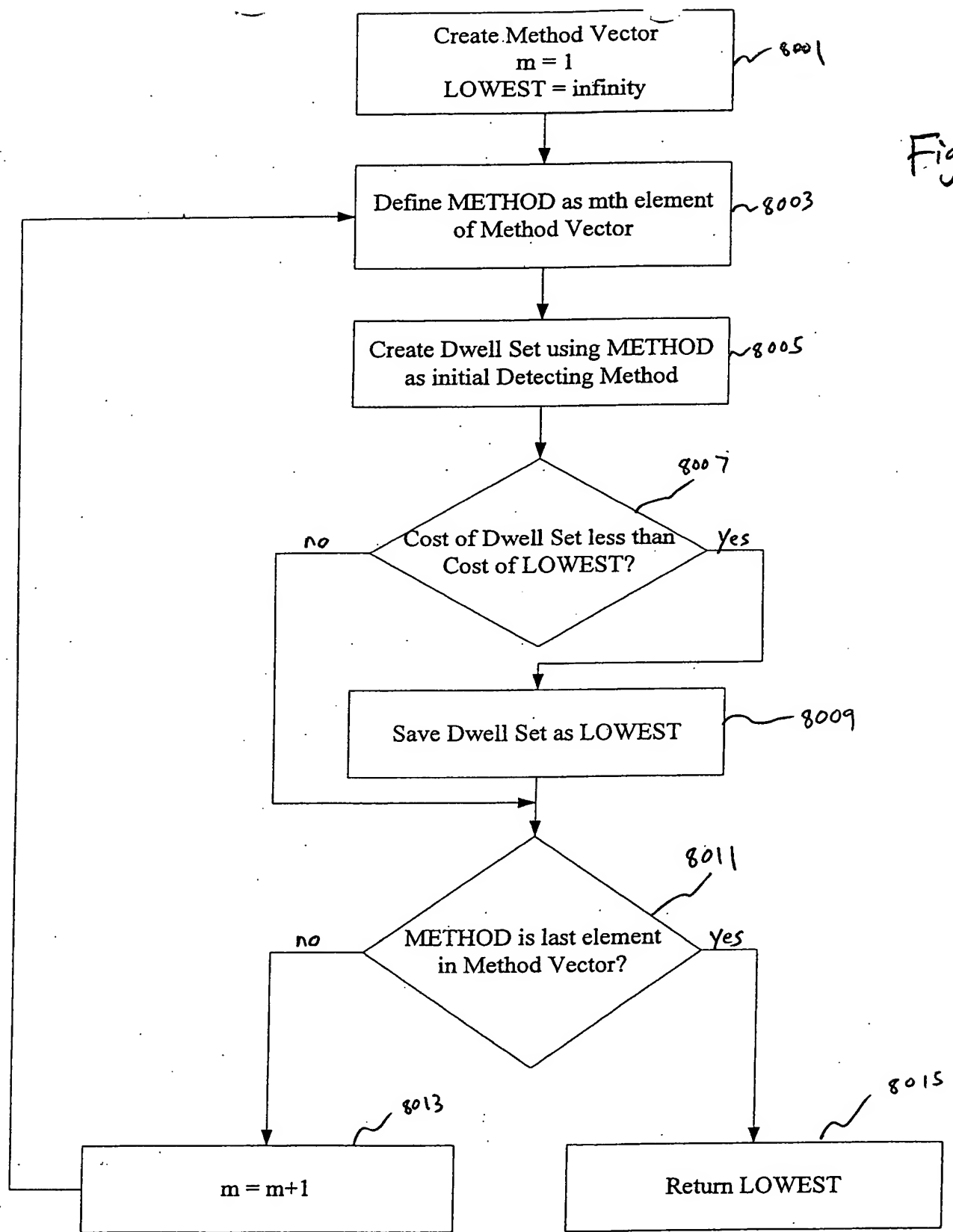


Figure 17

Figure 1:



Emitter	Dwell Duration (ms)	Revisit Time (ms)
Emitter 1	1	500
Emitter 2	2	1200

Figure 19

Emitter	Dwell Duration (ms)	Revisit Time (ms)	Cost
Emitter 1	1	500	.002
Emitter 2	5	1000	.005

Figure 20

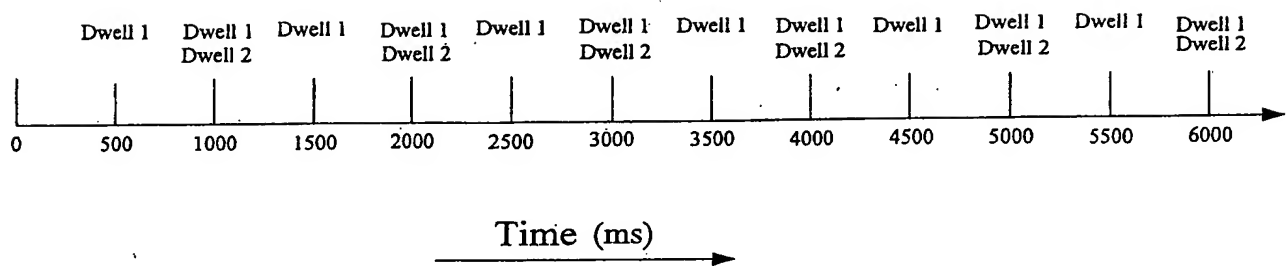


Figure 21

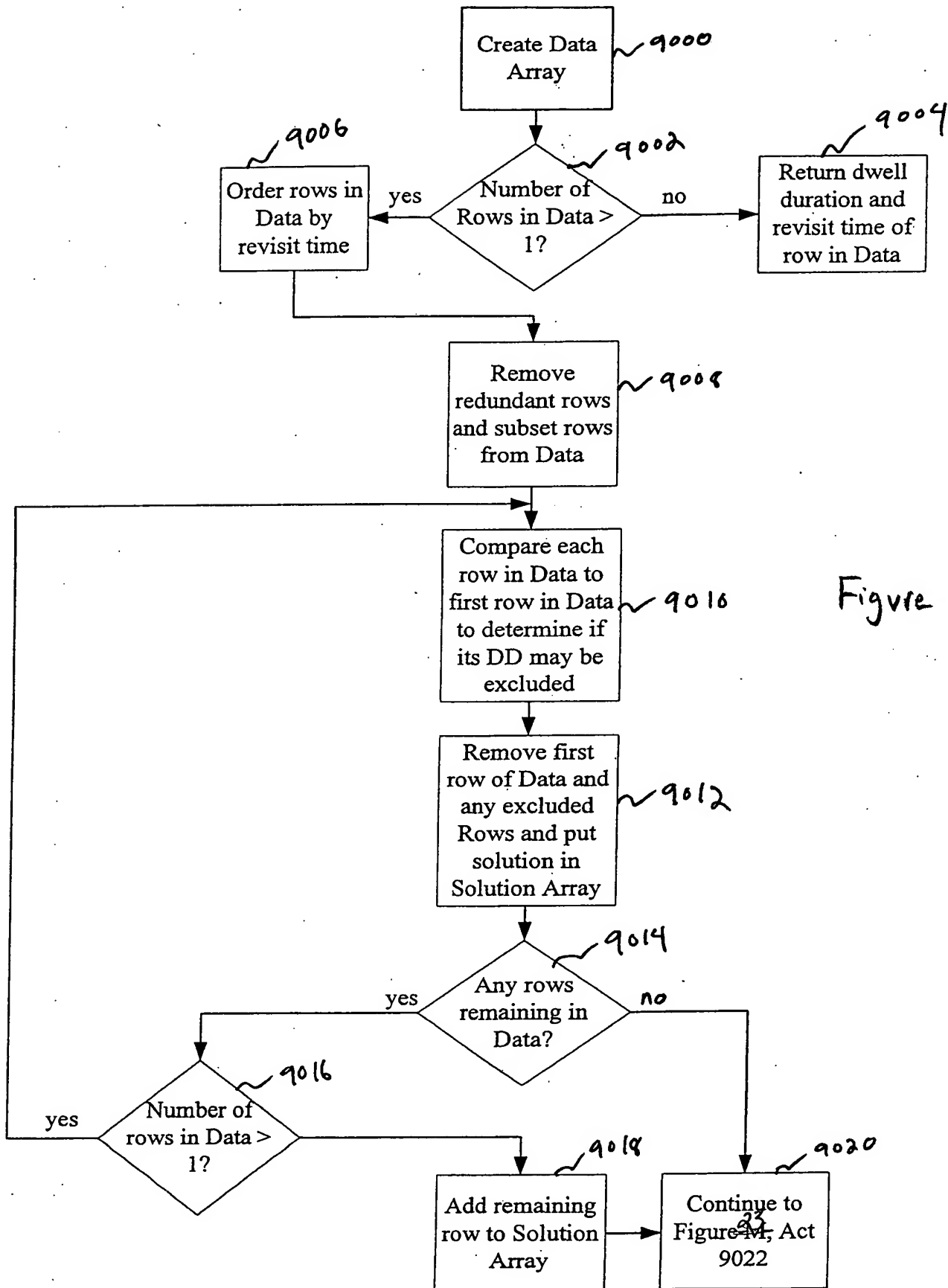


Figure 22



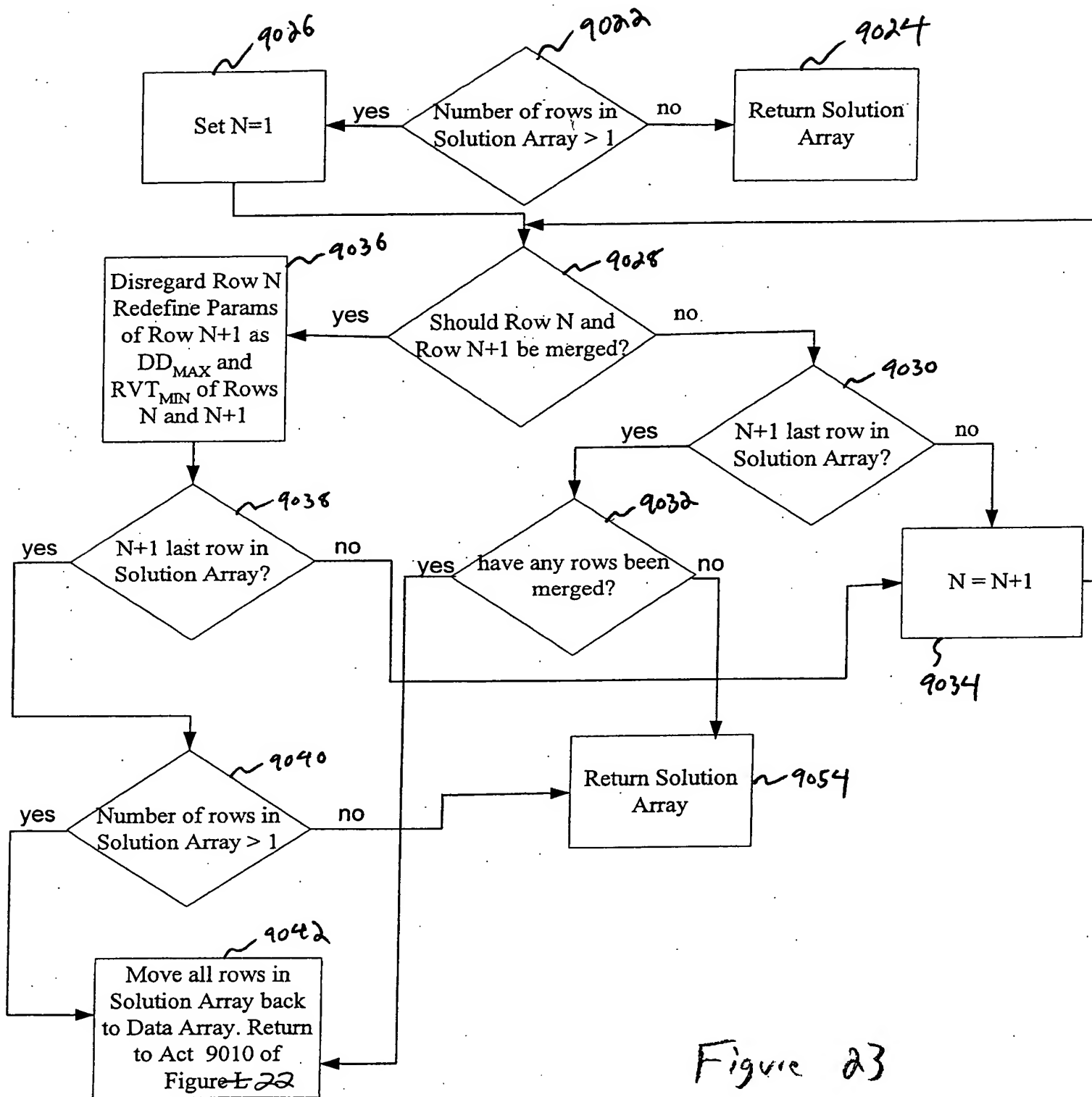


Figure 23

9044

Data		
MDT	EDT	RVT
3.05	17	2868
3	19	2000
3	19	2000
1	7	500
2	9	700
2.3	11	800
0.5	3.5	1000

Figure 24A

9044

Data		
MDT	EDT	RVT
1	7	500
2	9	700
2.3	11	800
0.5	3.5	1000
3	19	2000
3	19	2000
3.05	17	2868

9048  
9049  
9050

Figure 24B

9051  
9052

Data		
MDT	EDT	RVT
1	7	500
2	9	700
2.3	11	800
3	19	2000
3.05	17	2868

Figure 24C

9044

Data		
MDT	EDT	RVT
2	9	700
2.3	11	800

9046

Solution		
MDT	EDT	RVT
1	19	500

Figure 24D

9044

Data		
MDT	EDT	RVT
1	19	500
2	11	700

9046

Solution		
MDT	EDT	RVT
1	19	500
2	11	700

Figure 24E

9046

Solution		
MDT	EDT	RVT
1	19	500
2	11	700

Figure 24F

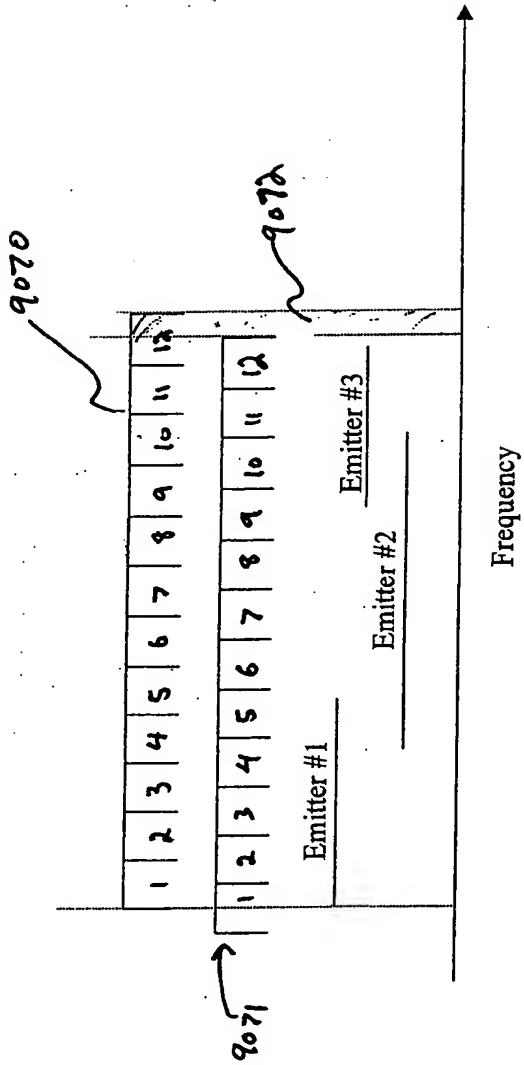


Figure 25

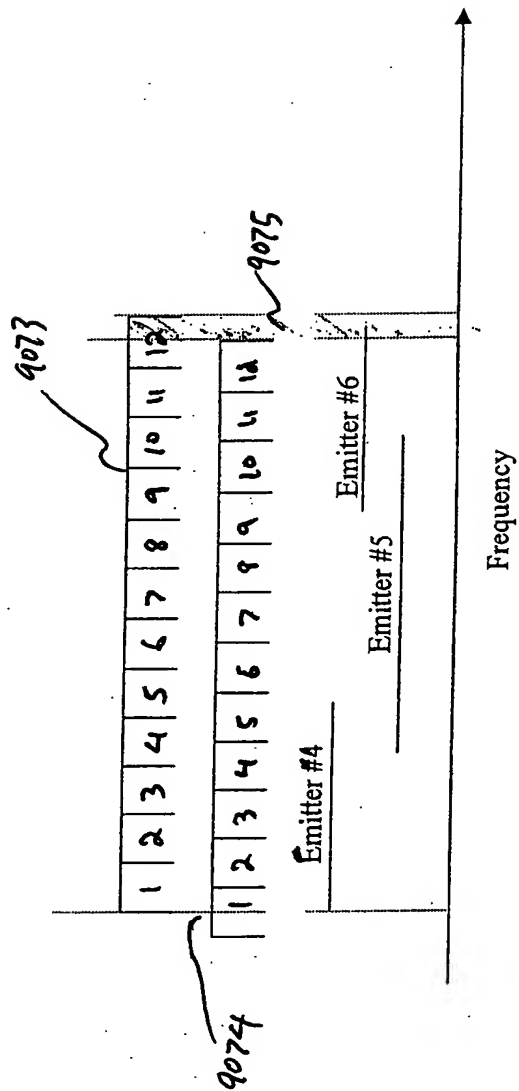


Figure 26

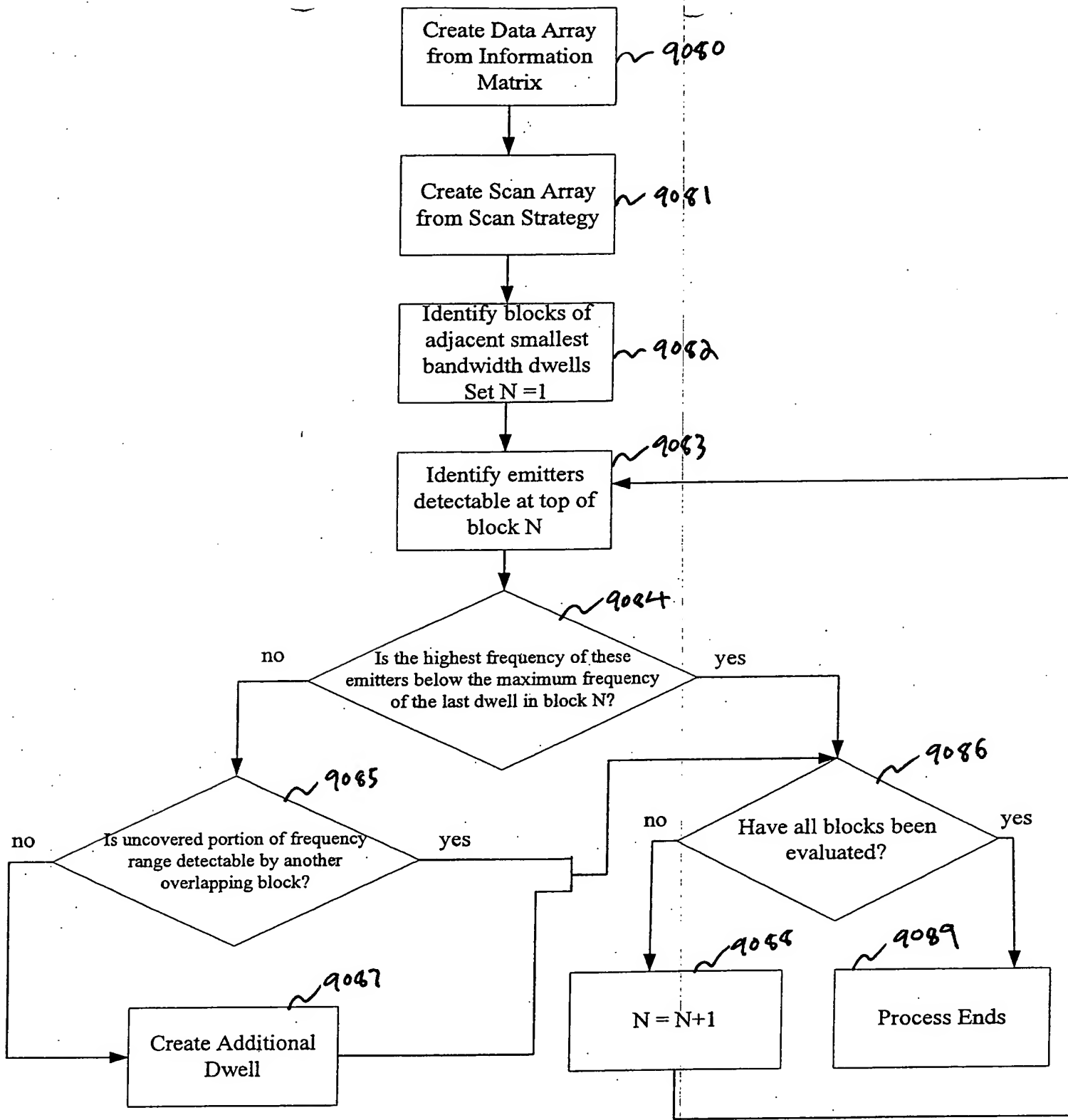
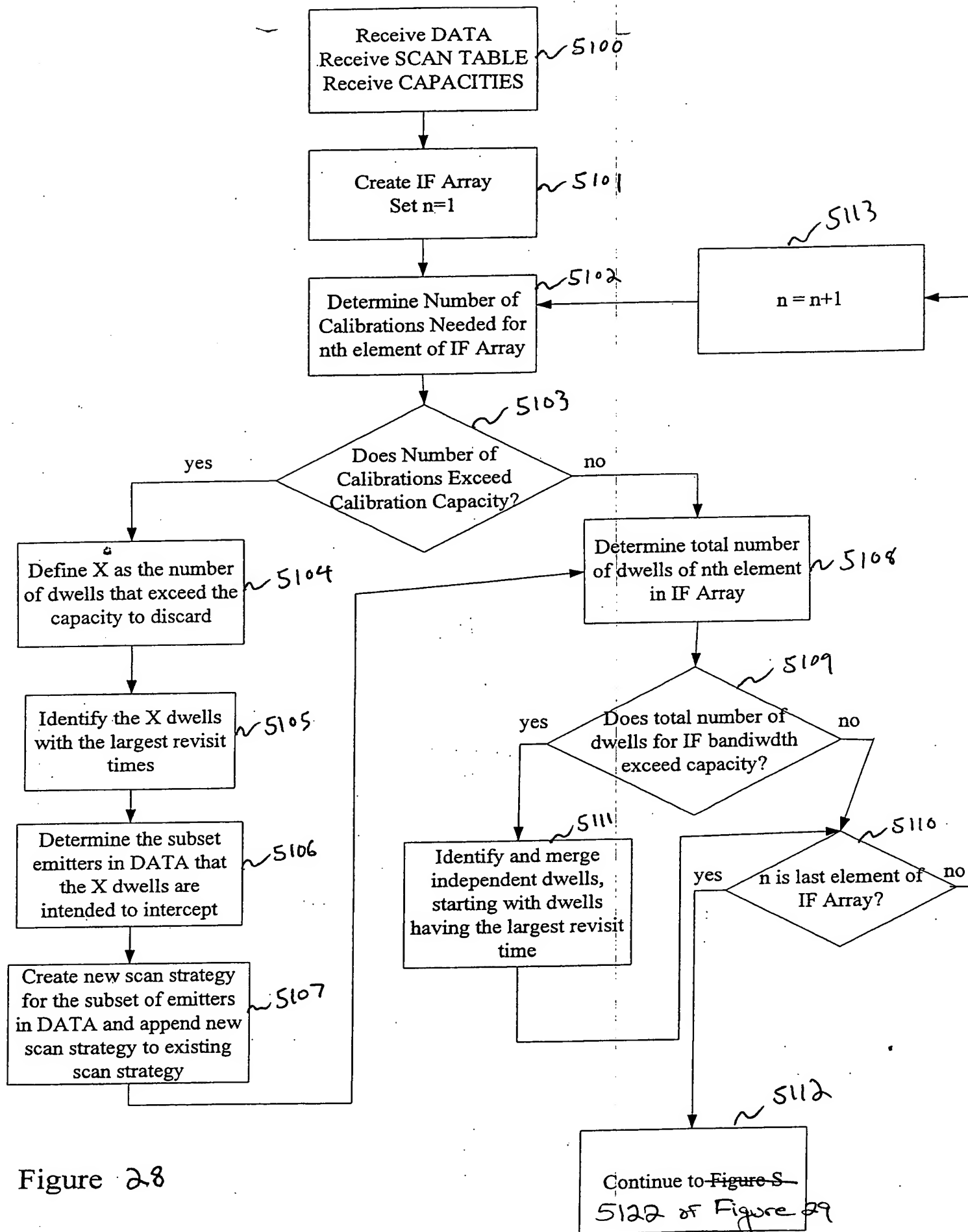


Figure 27



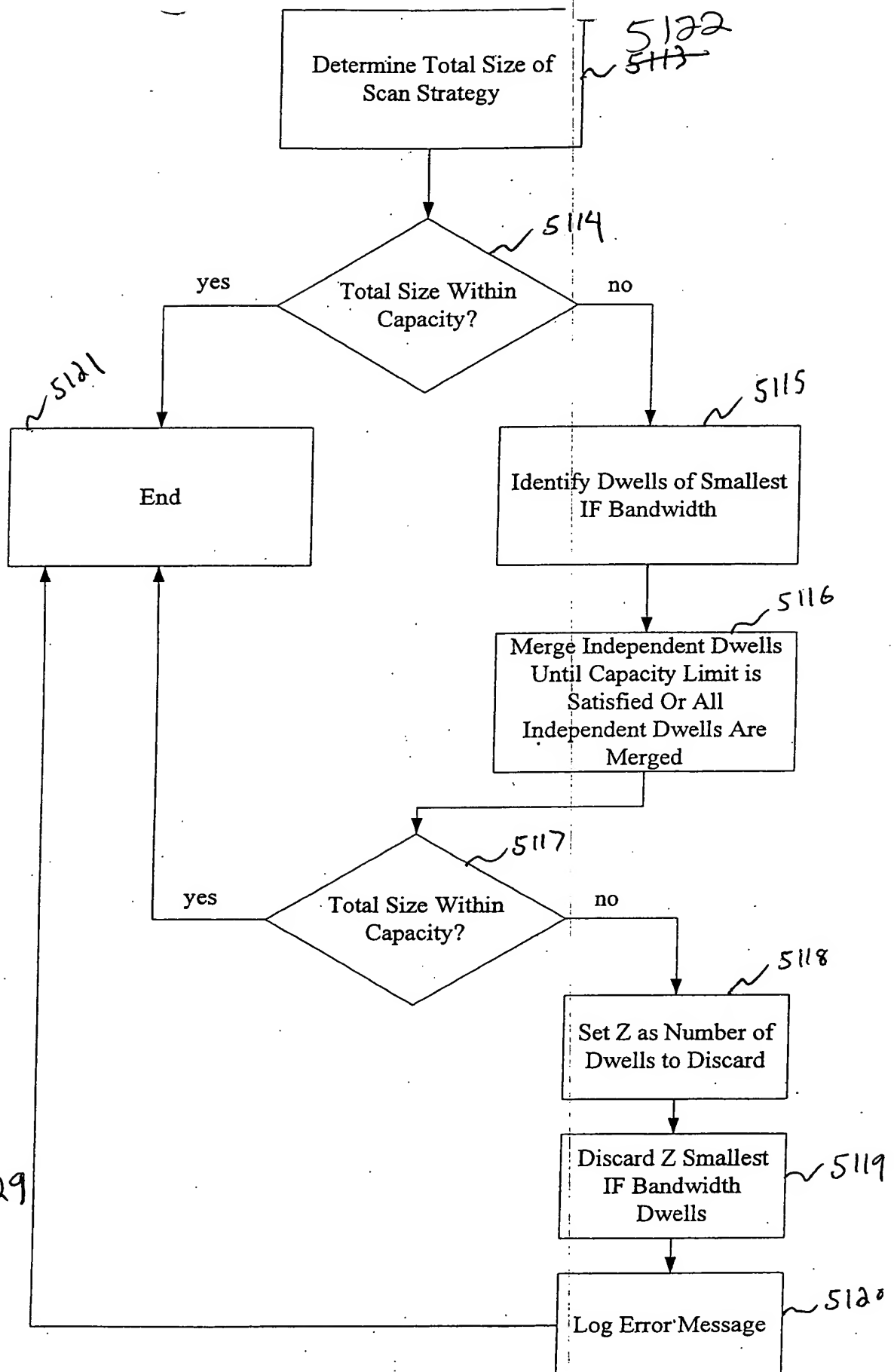


Figure 29

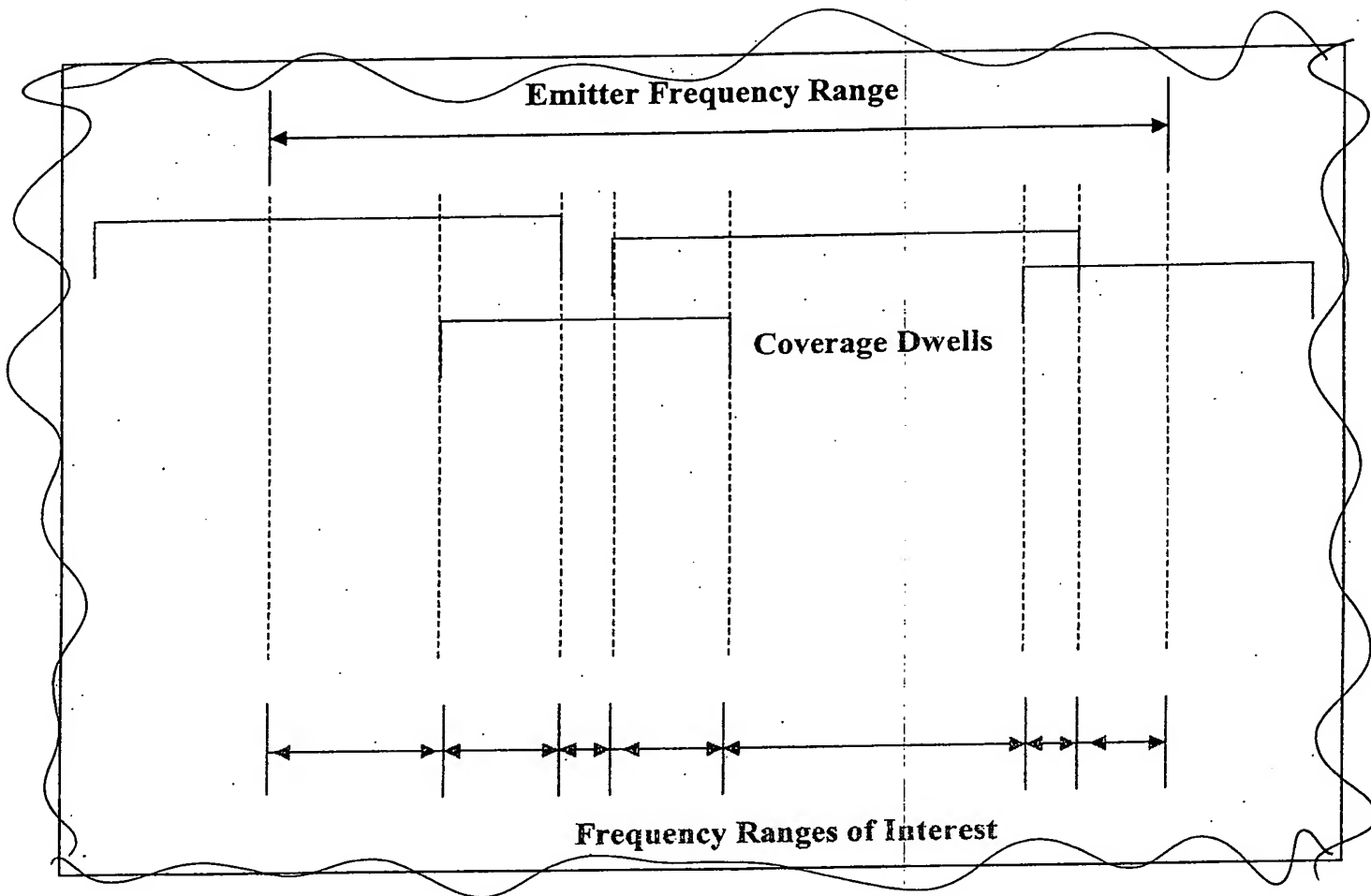


Figure 30



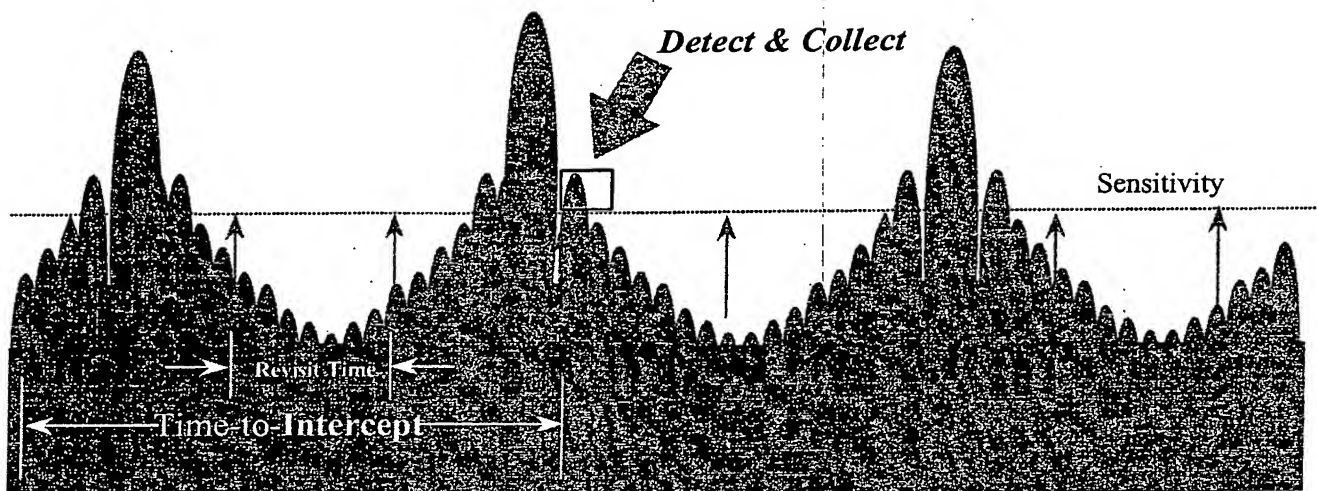


Figure 31

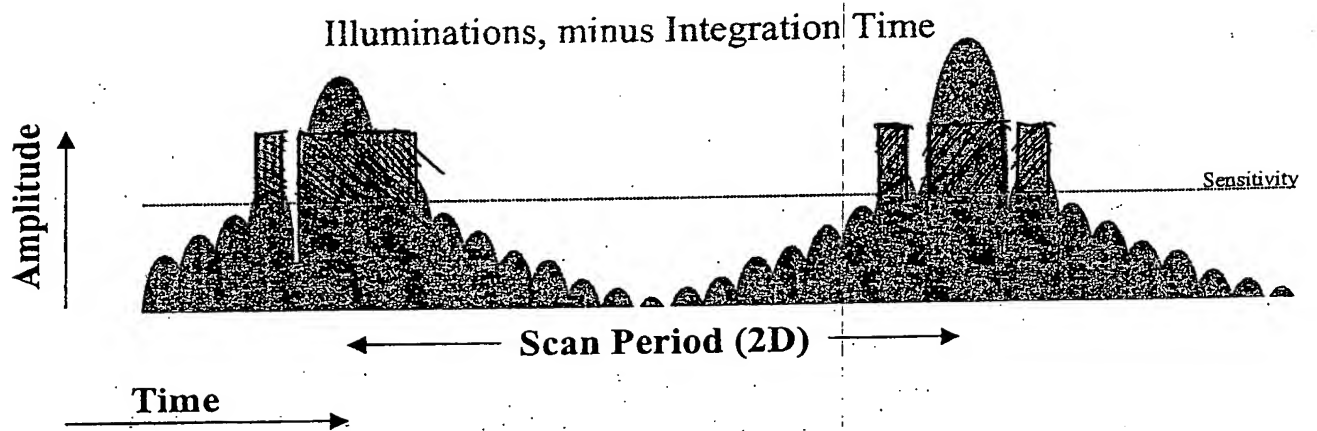


Figure 3a